

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027520**Date Inspected:** 28-Apr-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

**12W PP109.5 W5-LSE/LSW (Interior)**

This QA Inspector performed Magnetic Particle (MT) testing on the East Longitudinal Stiffener (LSE) and the West Longitudinal Stiffener (LSW) of the Deck Access Hole located at 12W PP109.5 W5 on the interior of the OBG. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications. This QA Inspector performed a UT inspection on approximately 10% of the welds on the LSE and the LSW. These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

**12E PP109.5 E2-DAH (Exterior)**

This QA Inspector randomly observed QC Inspector John Pagliero perform magnetic particle Inspection of the Deck Access Hole (DAH) located at 12E PP109.5 E2 on the exterior of the OBG. This QA Inspector observed that

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Mr. Pagliero found no rejectable indications at this location and found the work to be acceptable. This QA Inspector performed MT testing on the Deck Access Hole located at 12E PP109.5 E2 on the exterior of the OBG. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications. This QA Inspector randomly observed Mr. Pagliero perform Ultrasonic Inspection of the DAH at the same location and noted that the QC Inspector found six (6) rejectable indications which are listed below.

1. y+240mm: 80mm in length and 16mm deep.
2. y+1195mm: 30mm in length and 17mm deep.
3. y+2000mm: 90mm in length and 15mm deep.
4. y+2735mm: 40mm in length and 17mm deep.
5. y+2830mm: 25mm in length and 17mm deep.
6. y+4220mm: 25mm in length and 17mm deep.

## Deck Panel SA3214A

This QA Inspector made random observations of the fit-up operations of Drop in Panel SA3214A on the west OBG at 13W PP122.2-125. ABF Welding personnel were observed pre-heating the deck in locations for installation of temporary attachments used to assist in alignment of the OBG deck splices. This QA Inspector verified the 150°F pre-heat utilizing a 150° Tempilstik and QC Inspector William Sherwood was present to monitor the welding as it pertained to ABF-WPS-D1.5-F1200A. Mr. Sherwood was observed measuring the planar offset by employing a Bridge Cam Gauge in order to locate alignment points at W2.1 line from 0mm to 950mm. On a subsequent observation, work was being performed on A0 to A2.1. The welder was observed welding transverse to the roll of the steel as pertaining to submittal 1361 Revision 3. At periodic intervals, this QA Inspector observed ABF welder Rick Clayborn (ID 2773) attaching blank nuts and key plates along W2.8 line from 12570mm to 0mm in locations instructed by the QC Inspector. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was in progress and appeared to be in general conformance with the contract documents.

## Summary of Conversations:

There were no pertinent conversations on this date.



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### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Frey,Doug	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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